

Barred Sand Bass (*Paralabrax nebulifer*)

Status of the Population:

Barred sand bass are targeted exclusively by sport anglers; the commercial take of this species, like kelp bass has been illegal since 1953. Throughout the 1930s and early 1940s, sand bass, as well as kelp bass, were not considered to be quality angling fare but gained tremendously in popularity as game fishes by the mid-1950s (Leet et al. 2001). At that time, concern about the resource by sport fishermen and fishery managers resulted in the initiation of life history studies and the formulation of conservation measures. By 1959, a 10-fish bag limit and a 12-inch minimum size limit had been imposed on all three kelp and sand bass species; these measures were designed to counteract the declining numbers and shrinking size composition of the bass catches.

In 1985, 1987 and 1988, barred sand bass was the leading bass species in the CPFV catch, exceeding kelp bass landings for the first time since 1961 when kelp bass and sand bass landings were first reported separately (Leet et al. 2001). Beginning in 1994, and continuing through 2000, reported CPFV catches of barred sand bass have far exceeded kelp bass. Over 736,000 fish were taken during 2000, the all-time annual high catch for a bass species taken on CPFVs. Estimates of annual barred sand bass landings from the Marine Recreational Fisheries Statistics Survey (MRFSS) for all sport fishing activities (shore, pier, private boat, CPFVs, etc.) ranged as high as 1,940,000 in 1988 (Leet et al. 2001). Data from the MRFSS shows landings of barred sand bass in all modes during the 1990s were about 40 percent lower (30 percent lower for CPFVs) than those in the 1980s (Leet et al. 2001). Paradoxically, the Department's CPFV logs show a 40 percent increase in barred sand bass landings during the same period. Since the statistical way in which field samples are drawn in the MRFSS is based on previous years effort estimates, this survey may miss or over sample fisheries, as was probably the case in the 1980s and 1990s. CPFV data presents a more accurate picture of changes in the barred sand bass fishery since it represents a census of all vessels reporting and is not based on previous year's behavior.

Home Range/Migratory Patterns:

Although nothing is known about home range or migration patterns, tagging studies have shown barred sand bass are capable of movements of 5 to 40 miles. Anecdotal evidence suggests barred sand bass may occur in discreet groups which move up and down the coast as the water warms and cools.

Current Regulations:

No commercial take is allowed.

Recreational size limit is 12" total length

Possession limit is 10 in combination with kelp bass and spotted sand bass.

Current regulations generally appear effective in maintaining the barred sand bass population. Biological data collected from the MRFSS for the past 9 years shows the average weight has varied from 1.3 pounds to 2.0 pounds, with an average for the last 5 years of 1.5 pounds. The same data set shows the mode (the most frequently caught size fish) in length frequency distributions for 1993 through 1999 versus 2000 and 2001 has actually shifted to fish 1 inch larger (13 in. vs. 14 in.). Given that barred sand bass are managed on a yield-per-recruit basis, the current regulations are adequately protecting the resource.

How MPAs May Help:

Barred sand bass tend to aggregate on inshore sandy bottom areas during spawning events, where they also become vulnerable to the heaviest fishing pressure. Using reserves as a management tool would be effective by setting aside large sandy bottom areas along the coast as harvest refugia. Generally speaking, these sandy bottom areas have not been considered high priority areas to protect, as species biodiversity and overall fish densities tend to be low compared with reef areas. Other than the protection of spawning aggregations, traditional fishery management tools (size limits, bag limits, and seasonal closures) appear to offer more protection for barred sand bass than MPAs.